Governor's Blue Ribbon Water Task Force

Draft Meeting Notes August 23-24, 2006

Attendees: Larry Blair, Conci Bokum, Brian Burnett, Frank Chaves, John D'Antonio, Eileen Grevey-Hillson, Lisa Henne, Steve Hernandez, Sarah Kotchian, John Leeper, Elmer Lincoln, G.X. McSherry, Elmer Salazar, and Jack Westman attended the meeting. Tom Bowles attended as a guest.

Presentation from Dr. Tom Bowles, Science Advisor to Governor Richardson

Dr. Tom Bowles explained to Task Force members that he is a nuclear physicist and served as the Chief Science Officer for Los Alamos National Laboratory (LANL). Tom is now serving as Science Advisor to Governor Richardson. Tom described three areas that he is interested in pursuing as Science Advisor: 1) connecting science and technology with commercialization and private industry, 2) energy and water, and 3) high performance computing. Tom mentioned that he would like to find ways to enhance technology transfer from the laboratories. For example, LANL uses modeling and simulation to understand materials such as plastics and foams, and these technologies could also be used by the pharmaceutical and health care products industries. Tom added that through his work at LANL and his connections with universities, he knows people with the solutions but would like to better understand what the most important questions are.

Tom stated that he has three major areas of interest in water issues. The first area is agricultural water conservation. Tom described a paper presented at the New Mexico Tech Water Research Symposium that argued that water conservation in agriculture could have a negative impact on aquifer recharge because we rely on our leaky system to sustain groundwater. Tom expressed his disagreement with that mode of thinking and his view that given the economic constraints of desalination, the state must look harder at water conservation. Tom commented that there do not seem to be any policies or incentives to conserve water in New Mexico, and that he sees the need for a combination of incentives and requirements for water conservation.

Tom also mentioned that he believes that Active Water Resource Management is a positive step, and that he sees a need to get real-time data on water usage is needed for sound decision making. Tom commented that the national laboratories could help with developing technologies for understanding water use and water cycles, for example, with technologies for measuring water content in soil.

Saline groundwater is Tom's second area of interest. Tom noted that New Mexico has substantial reservoirs of saline groundwater and produced mine water. Tom informed Task Force members that there is an effort moving forward in the Carlsbad area to produce bio-diesel by growing algae. Bio-diesel is desirable because it is cleaner, more efficient, and better on engines than standard diesel. Algae has highest yield of oil per acre of any of the diesel producing crops; 1500 square miles of land could produce enough diesel to supply the entire US. Algae production is water intensive, but the primary requirements of brackish/saline water, open

unused land, and solar radiation are abundant in New Mexico. Tom mentioned that there is a company from California that is considering building a biodiesel plant that would be converted to an algae plant. The financial and environmental feasibility must both be considered. Environmental impacts that must be understood include whether it would be sustainable to use the brackish water, impacts of evaporation, and impact on aquifers. Tom explained that biodiesel production with algae also has potential to be environmentally friendly because dairy farm effluent can be used as fertilizer.

Tom's third area of interest in water issues is in water and health. Approximately 90% of naturally occurring diseases are transmitted by water, and therefore water is a significant link in prevention and treatment. For example, New Mexico is one of the three areas being monitored for avian flu by the department of the interior. 125,000 wild birds will be tested, but the sample size is too small to be an effective monitoring tool. The avian flu virus can survive in water for at least 200 days, and sampling water would be much more effective than sampling birds, but the diagnostic tools to sample water for avian flu have not yet been developed. A similar situation exists with cholera. Tom believes that investment in science and technology to understand these basic research issues will be very important to the state and for economic development. Tom believes that New Mexico should be trying to identify the serious issues in water and agriculture that science and technology could help solve.

Brian Burnett commented that Tom raised a fundamental aspect of sustainability – bold and quick versus bold and intergenerational. Brian added that some of the things that Tom presented are new ideas to the Task Force, and others are more familiar.

Elmer Salazar asked Tom if he had talked to the governor about developing a State Directed Research and Development (SDRD) program modeled after the Laboratory Directed Resarch and Development (LDRD) program. Elmer suggested that the governor include this in his year of water initiatives.

Sarah Kotchian commented that it would be useful to meet with the NMED and the Gary Simpson at the Department of Health. Sarah also mentioned a group called The Research Association of Medical and Biological Organizations (RAMBO), which is made up of scientists from all over New Mexico that meet monthly and talk about data related to public health. RAMBO also has an environmental epidemiology section. Sarah suggested contacting members of that group to find out what their primary issues are, and added that the Task Force would be interested in that feedback. Sarah also commented that the state needs high-level leadership in promoting understanding of the connections between water and economic development.

Task Force members invited Tom to attend future meetings to continue discussing water issues and policy.

Updates from the Regions

Conci Bokum reported that three of the state's water planning regions (Middle Rio Grande (MRG), Socorro-Sierra (SS), and Jemez y Sangre (JyS)) have been meeting in a series of workshops sponsored by the New Mexico Water Dialogue and the Interstate Stream

Commission. The workshops came about in response to a 2004 report by SS Papadopoulos & Associates that examined the state's water situation and regional water plans between Otowi gage and Elephant Butte. Based on the information in the regional water plans, the report predicts that the Rio Grande compact will not be met 3 out of 5 years. The report also identifies cases of double-dipping for supply between regional water plans, and notes that some of the alternatives for closing the gap are not realistic. The workshops are intended to raise awareness of the situation and to encourage the three regions to work together to find solutions. The first meeting was structured to get everyone on the same page and to provide background on each of the three plans. The second meeting focused on sharing feedback from the regions on these problems. Most of the suggestions that came out of the second meeting were for things that were easy and not controversial, but not effective either. Toward the end of the second meeting, participants started talking about shortage sharing agreements. Conci noted that there is general agreement that the group should keep meeting, and that there is a need for consistent data and methodologies among the three regional plans.

Eileen Grevey-Hillson asked whether any representatives from the MRG pueblos attended the workshops. Conci responded that only Peter Pino has come from the pueblos.

Frank Chaves reported that he attended the CLE International Conference on New Mexico Water Law. Federal funding issues dealing with water rights settlements and the difficulty in securing federal support or funding were discussed. Frank recommended attending the annual conference as a way to hear about current issues in water law.

GX McSherry reported that up until two weeks ago, his region has been dealing with drought. Priority calls have been attempted and there is a discussion on upper Mimbres about what will happen there. GX also reported that there has been a lawsuit filed against the State Engineer, and that there has been an Active Water Resource Management committee formed to help people figure out how to use the water that is available. GX is a member of that committee. The OSE has been very active in the region, and has almost tripled its staff to manage the workload. Many flumes and devices have been installed to expedite the control and measurement of water.

Elmer Lincon reported that Navajo Lake is holding its levels fairly well at 6065 ft of elevation. A meeting will be held to revise the fall projection for lake levels. Elmer also commented that this is the time of year that shortage sharing agreements for the next calendar year are worked out.

Elmer also reported that the San Juan stream adjudication continues to be very active. The NM State Land Office is filing pleadings to meet criteria to join the San Juan adjudication. If the Land Office is successful in meeting threshold criteria, it will join the adjudication and could have a very large impact based on early priority dates. Elmer also reported that the OSE filed a brief in opposition to the State Land Office pleadings.

Elmer informed Task Force members that the Navajo Nation primary elections were held on August 8th, and Linda Lovejoy will compete against Joe Shirley. The implications of the election results for Navajo support for the settlement are not yet clear.

Elmer also reported that he will be retiring and relocating to Albuquerque. Elmer asked whether his relocation would present an issue for the group, and if someone from the Four Corners area should be appointed. Elmer added that his company would be happy to provide a nominee, or perhaps Jim Dunlap could nominate a person. Elmer expressed his desire to continue serving on the Task Force along with his concern that the Four Corners area continue to be represented. Task Force members congratulated Elmer on his retirement and expressed their hope that he would continue to serve on the Task Force.

Eileen Grevey-Hillson reported that climate change is also being discussed at the Western States Water Council, whereas a year ago it was not discussed at all. State engineers in the western states are now seeing the need for additional storage as a way to deal with supply. There will be a need to store water in high mountain areas to compensate for lack of snowpack. Eileen also reported that there is absolutely no move on the horizon to deal with Native American claim settlements.

Elmer Salazar asked Eileen if there would be automatic opposition from the environmental community to additional storage. Eileen responded that the assumption is that there will be opposition, and additional issues related to easements.

Eileen also described the poor state of water infrastructure that she observed during a recent trip to Peru, and commented on the high number of deaths worldwide that result from lack of potable water. Eileen also commented that people in Peru are talking about how rapidly the glaciers are melting and the impact it is having on them.

Steve Hernandez reported that there is ample water on the Pecos and that there will probably be no more releases from upstream for the Carlsbad Irrigation District. Federal agencies are trying to figure out how to keep habitat wet for the bluntnose shiner. Steve added that downstream reservoirs are full, but half of that water will go to Texas.

Steve also reported on his involvement during the flooding in Hatch, and that he was disturbed by how unprepared we are for emergencies. Steve explained that in Hatch, the flooding occurred when an arroyo broke because of lack of maintenance. He described how lack of interjurisdictional cooperation and communication contributed to the flooding. Steve also reported that the state and federal response to the need for evacuation of Hatch residents trapped in buildings was severely inadequate. Steve commented that the Hatch flooding is a textbook example of why the state needs real-time data about what is happening on the river.

Frank Chaves asked if a comprehensive report is being prepared to identify what needs to be done to deal emergencies, and noted that with climate change, this type of thing is going to happen to other communities. Frank also commented that Governor Richardson needs to get ahead of these issues – fire, flood, and other extremes – and figure out how we can better prepare to respond to them.

Conci Bokum commented that flood preparedness should maybe be part of the year of water recommendations, and that severe flooding is almost never talked about in New Mexico. Steve Hernandez commented that flood control dams were built by the Natural Resources Conservation

Service in the southern part of the state. The dams were originally built to protect 5-6 farms, but now there are a lot of people living downstream. The OSE has had to change the category of dams from low hazard to high hazard – high hazard means that if it fails, someone will get hurt. Steve added that we need to respond to changing conditions that change the level of risk.

Steve also reported that John D'Antonio made a presentation of basin specific rules for Lower Río Grande. Under these rules, there will be no call on any indoor domestic use, regardless of supply. One water master has been appointed to monitor the situation. The OSE has also proposed a high impact area that is based on proximity to the river rather than on priority date. The high impact area will be administered differently from other areas. Within the high impact area, a priority call will be placed on the water right holders regardless of the date of their rights. This proposal was not well received be meeting attendees. There were also disputes over the authority of water master over the EBID.

Steve reported that a motion to dismiss in the domestic well litigation was denied, as were a motion for more definite statement and other motions. The case will go forward, and will go to trial, probably within months.

GX McSherry informed Task Force members that he plans on being in attendance much less, but wants to stay connected to the group if possible. GX thanked Task Force members for their work. GX also commented that he has a great deal of respect for the viewpoints of Task Force members, and that his time on the Task Force has broadened his own thinking.

Sarah Kotchian told GX that the experience that he brought to the Task Force has meant a great deal to the other members. Jack Westman added that no one in the current or past Task Force has the understanding of legislative issues and how to work with state government that GX has. Jack also described how the trip to Deming showed him the importance of the lifestyle and water to rural communities. Sarah added that it is inherent to the culture of our state, and we want to be able to keep it alive.

Steve Hernandez recalled his work with GX dating back to when they were fighting El Paso, commenting that he came with ideas and GX knew how to make things happen. Steve added that he is constantly reminded by his clients of the importance of the lifestyle that GX lives. Steve concluded by saying that Task Force members and the legislature would miss having access to GX's insights. Conci Bokum commented that GX was a legislator of a type that we do not have any more. Eileen Grevey echoed others' thoughts that all of the Task Force members have been enriched by GX's knowledge and by getting to know such a decent and honorable human being. Frank Chaves thanked GX for his willingness to share his knowledge and wisdom with the Task Force.

Jack Westman moved that the Task Force confer the title of Member Emeritus to GX. The motion was seconded and unanimously approved.

Year of Water

Brian Burnett reported that he represented the Task Force at a listening session for the Year of Water with Governor Richardson. Other attendees included John D'Antonio, Estevan Lopez, Conci Bokum, Debbie Hughes, John Leeper, Everett Chavez, Paula Garcia, and Jim Dunlap, among others. Governor Richardson started the session by stating that he is looking for bold ideas, and stayed to listen to recommendations for about 90 minutes. Brian focused his comments on recommendations to appropriate \$100M for the Water Trust Fund, support adjudication, provide seed money for Indian Water Rights Settlement Fund, and creating dedicated source of funding through an equitable tax. Brian commented that the governor heard a laundry list of recommendations, but many were not necessarily bold. The group will be called back together, and Governor Richardson wants to have a legislative package ready by December 1.

Conci commented that Jim Dunlap spoke in behalf of the Indian Water Rights settlements, and that John Leeper also used his time to talk about the importance of bringing attention to the settlements and the need to bring forth a team or person whose only job would be to push the settlements. Conci noted that the combination of Jim Dunlap's and John Leeper's presentations made a strong impact. Conci also commented that she thought the governor responded well to the idea of creating a dedicated funding source.

John D'Antonio reported that in his recommendations to the governor, he reminded him that the OSE is being subtly bold in managing water, settlements, domestic well regulations, and protection of senior rights through AWRM and domestic wells initiatives. John stated that the governor talked about exploring protection of senior water rights while still emphasizing economic development. John also emphasized conservation (and the fact that the Water Use and Conservation Bureau of the OSE is under funded), and recommended capital outlay reform using the public schools process as a model. John stated that this is needed to develop a process for regionalization. John also recommended promoting security through in-state food processing.

Task Force members continued the process of deciding what to include as Year of Water recommendations from the list that was started during the July meeting. John D'Antonio commented that he has been working on grouping the year of water into three categories: water management initiatives, water infrastructure development initiatives, and environmental protection initiatives. Projects and funding within those categories were as follows:

Water management

- State water plan implementation,
- AWRM,
- Climate change and variability,
- Drought declaration,
- Geospatial Data Acquisition Coordination Commission (GDACC),
- New Mexico Aerial Imagery Acquisition (NMAIAP),
- GIS mapping project,
- MRG adjudication preparation.

Water Infrastructure development

- Water Infrastructure Investment Team process,
- Water Trust Board,
- Indian water rights settlements,
- ESA collaborative,
- Ute pipeline project,
- Acequia and dam safety,
- Salt basin.

Environmental Protection

- NM forest and watershed health plan,
- Strategic river reserve,
- Clean water, clean energy and conservation initiatives,
- (ESA collaborative),
- Energy and Minerals as a clearing house for watershed health and riparian improvement projects,
- Agricultural food processing (protects water for agricultural purposes),
- Reclamation of water for dairies.
- Produced water for cooling power plants,
- Water conservation,
- Water recycling and reuse.

GX commented that the Task Force should be supporting some of the state engineer's initiatives. A comment was added that initiatives that will do the most for sustainability, culture, and economic growth should be a higher priority.

Sarah Kotchian suggested using a slogan that would express the idea of healthy watersheds, healthy communities, and a healthy economy.

Frank Chaves suggested using the concept of bringing everyone into the 21st century by providing running water in each household. Frank also suggested that a legislative attitude or intent could be expressed in the form of resolutions.

GX commented that New Mexico is not going to create new water, but rather will need to conserve the water that is available. Conservation will require funding and technology to implement. GX also commented that the strategy for economic development is to encourage companies to come into the state by forgoing the gross receipts tax or other taxes, and the same approach could be used for a conservation program without cost for the state.

Conci commented that the Task Force should be strategic about what recommendations it chooses. Conci added that the Task Force has already said that it thinks certain things are really important, i.e., the Water Trust Fund and the settlements. Conci suggested that the Task Force

might want to recommend that the Water Innovation Project Fund be used only to fund conservation and safe drinking water projects.

Brian commented that funding the Indian Water Rights Settlement Fund would show the federal government that New Mexico is serious about the settlements. Brian added that the Task Force should provide guidance about the importance of this – otherwise the money will gravitate toward the Water Trust Fund.

Frank commented that the state needs to push the federal government to step up and show that it is going to fight for New Mexicans.

Steve suggested giving local governments the ability to tax for local projects, and have the state match those funds. This would allow local governments to decide what is important.

Larry commented that managing variability and the idea of the importance of water for creating certainty are themes that could be emphasized.

Sarah commented that New Mexico does not have a plan for R&D, and also lags in data acquisition –health data and environmental data are needed in as close to real time as possible. Sarah also commented on Conci's idea about using the Water Innovation Project Fund for conservation and safe drinking water. Sarah suggested that the Task Force could specify certain areas such as Deming that need certain technologies. Elmer Salazar suggested that the governor allocate \$10M for a State Directed Research and Development (SDRD) program modeled after the LANL Laboratory Directed Research and Development program (LDRD).

Brian commented that he had heard a lot of great ideas, but that the Task Force will have to choose among them and find a few that everyone can agree on.

The discussion continued on Thursday with the following list of possible recommendations that were captured from the discussion on Wednesday:

- 1. Water Trust Fund
- 2. Indian Water Rights settlements
- 3. Directing Water Innovation Project funding for water conservation projects.
- 4. Safe drinking water
- 5. Tax regional authority to tax with state/federal matching
- 6. Targeted R&D SDRD with \$10M investment
- 7. No gross receipts tax on conservation investing
- 8. Data acquisition
- 9. State and regional water plan funding
- 10. Watershed health

John D'Antonio commented that the governor made the tie between agriculture and economic development, including ideas such as food processing in state and ethanol production (ethanol crops use less water than the crops that are now produced). John added that Governor

Richardson is very focused on economic development, and is likely to pay attention to ideas about economic development based in water conservation. Sarah added that certainty and technology can also be tied in with conservation and economic development.

GX commented that agriculture is not enjoying a good economic situation right now, and that the need for fuel is paramount in that industry and others. GX added that investment in sustainable energy could provide a tremendous benefit to the state.

Steve wondered whether there is such a thing as water conservation that will stimulate economic growth or energy independence. Steve added that most other initiatives focus on transferring water into other uses.

Sarah suggested folding #6 (targeted R&D) and #7 (no GRT on conservation investing) into #3 (directing Water Innovation Project funding for water conservation projects). Sarah also suggested identifying a couple of recommendations that would bring in the national laboratories and universities, and that the governor could kick off for the Year of Water. As part of the innovation, the state could give tax credits to companies that do innovative conservation technologies, similar to how the film industry has been promoted.

Jack expressed support for Larry's way of phrasing the connection between water and economic development – "Water is the fuel for the economic engine".

Sarah commented that the security theme appealed to her – security for economic development and community development.

Members reiterated the recommendations for promotion of biodiesel, using the film industry formula for attracting conservation technologies, and tying conservation and economic development to the Water Innovation Project Fund.

John mentioned that the previous Blue Ribbon Water Task Force tried to find a market for watershed rehabilitation, and there has been progress in that area – companies want to use that biomass for energy production. John suggested that watershed improvements and economic development could also be pulled in.

John commented that there have been in discussions about finding permanent sources of funding for water projects, possibly though an excise tax for automobiles (raise from 3% to 4%), property transfer tax, and liquor excise tax. This would tie into the DWI initiative. Jack responded that each of those taxes has a constituency to oppose it and someone else who will want the money (e.g. the highway department, MADD, etc.). Jack added that it would be difficult to get a dedicated source of funding for water based on a tax that is unrelated to water.

Task Force members discussed the various suggestions for recommendations to Governor Richardson for the Year of Water, and arrived at consensus on the following list:

1. Funding for the Water Trust Fund – \$100M

- 2. Indian settlements \$100M
- 3. Innovation in water conservation (agriculture security, energy and climate change) \$50M
- 4. Explore ways to create recurring source of funding for water projects.

Lisa and Brian agreed to work together on the letter, which will be distributed in draft form to the Task Force prior to sending to the Governor.